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Base Insert Device For Paper Bags

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**Claims**

1. Base insert device for crossed base valve bags, for the formation of crossed bases in paper bags, said device comprising the following characteristics:

- folding devices which introduce folds at the ends of the tubular sections from which the bags are produced,
- one or more gluing stations, which apply glue to the regions of the folds for gluing and/or the sheets, provided for gluing to the bases,
- at least one pressing station in which the folded bases and the sheets are brought into contact and glued,

**characterized by**

at least one gluing station for the sheets and/or bases

- that comprises glue outlet openings (17) which may be selectively supplied with glue, whereby the selection of the glue outlet openings (17) defines the format of the glue application (6, 7, 8, 9)
- whereby said glue outlet openings are provided with at least one application head (1)
- which supports valves (3) that can selectively open and close the connection (11, 16) between glue outlet openings and a glue supply unit (4a, 4b, 13, 15),
- whereby said glue supply unit comprises glue supplying lines (4a, 4b, 13) and at least one chamber (15) through which at least one part of the valves (3) is

supplied with glue and which has a diameter of 5 mm at least in one point.

2. Base insert device pursuant to the preceding claim  
**characterized in that**  
this chamber (5) has a diameter of at least 7 mm.
3. Base insert device pursuant to the preceding claim  
**characterized in that**  
this chamber (15) has a diameter of at least 10 mm.
4. Base insert device pursuant to the preceding claim  
**characterized in that**  
this chamber (15) has a diameter of at least 15 mm.
5. Base insert device pursuant to any of the preceding claims  
**characterized in that**  
this chamber (15) is arranged in the application head (1) or directly on the application head (1).
6. Base insert device pursuant to any of the preceding claims  
**characterized in that**  
this chamber (15) runs linearly in the spatial direction (y) perpendicular to the transport direction of the bag components (x).
7. Base insert device pursuant to any of the preceding claims  
**characterized in that**  
at least two of the valves (3), which are supplied with glue from the same chamber (15) are arranged in an overlapping manner when seen in the spatial direction (y), which extends perpendicular to the feed direction (x) of the bag components.
8. Base insert device pursuant to any of the preceding claims  
**characterized in that**

the sum of the measures of the valves (3) in the spatial direction (y) perpendicular to the feed direction (x) is larger than the length of the chamber (15) in the spatial direction (y) perpendicular to the feed direction (x), whereby all the valves (3) are supplied with glue from this chamber (15).

9. Base insert device pursuant to any of the preceding claims

**characterized in that**

the volume of the chamber (15) has a ratio of at least 1.5 to the volume sum of all the glue connections (11, 16) to and from the valves (3), which are supplied with glue from this chamber.

10. Base insert device pursuant to any of the preceding claims

**characterized in that**

the gluing station comprises several chambers (15) whereby every chamber (15) supplies one part of the valves (3) in each case with glue.

11. Base insert device pursuant to any of the preceding claims

**characterized in that**

the chamber (15) has a rectangular cross-section.

12. Base insert device pursuant to any of the preceding claims

**characterized in that**

the chamber (15) has a circular cross-section.

13. Base insert device pursuant to the preceding claim

**characterized in that**

the chamber (15) is a borehole that is inserted into the application head.

14. Base insert device pursuant to any of the preceding claims

**characterized in that**

at least one glue supplying line (4a, 13) via which glue is supplied to the chamber (15) engages into the chamber (15).

15. Base insert device pursuant to the preceding claim

**characterized in that**

the chamber (15) can be displaced along the glue supplying line (4a, 13) at least partly in the direction (y) extending perpendicular to the transport direction (x) of the bag components.

## 16. Base insert device pursuant to any of the preceding claims

**characterized in that**

the glue supplying line (4a, 13) has a cross-sectional area, which is smaller than that of the chamber (15).

## 17. Base insert device pursuant to the preceding claim

**characterized in that**

the glue supplying line has a cross-sectional area, which is smaller than that of the chamber by at least 40 mm<sup>2</sup>.